## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date December 1, 2015 Revision: December 1, 2015

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

- · 1.1 Product identifier
- · Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC
- · **Article number:** 1140 (1011611)
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- · Application of the substance / the mixture: Crowd Control Device
- · Uses advised against Contact manufacturer.
- · 1.3 Details of the supplier of the Safety Data Sheet
- · Manufacturer/Supplier:

Safariland, LLC 13386 International Parkway Jacksonville, FL 32218 Customer Care (800) 347-1200

1.4 Emergency telephone number:

ChemTel Inc.

+1 (800)255-3924, +1 (813)248-0585



#### **SECTION 2: Hazards identification**

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008

Hazard Statement H412 is not applicable to the OSHA US regulations.



exploding bomb

Expl. 1.4 H204 Fire or projection hazard.



Skin Irrit. 2 H315 Causes skin irritation.

Eye Irrit. 2 H319 Causes serious eye irritation. STOT SE 3 H335 May cause respiratory irritation.

Aquatic Chronic 3 H412 Harmful to aquatic life with long lasting effects.

- · Additional information: 0 % of the mixture consists of component(s) of unknown toxicity.
- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

(Cont'd. on page 2)

#### according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

(Cont'd. from page 1)

#### · Hazard pictograms





#### · Signal word Warning

#### · Hazard statements

Hazard Statement H412 is not applicable to the OSHA US regulations.

H204 Fire or projection hazard. H315 Causes skin irritation.

H319 Causes serious eve irritation.

H335 May cause respiratory irritation.

H412 Harmful to aquatic life with long lasting effects.

#### · Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No

smoking.

P250 Do not subject to grinding/shock/friction.

P261 Avoid breathing dust.

P264 Wash thoroughly after handling.

P280 Wear protective gloves / eye protection. P271 Use only outdoors or in a well-ventilated area.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P373 DO NOT fight fire when fire reaches explosives.

P370+P380 In case of fire: Evacuate area.

P302+P352 IF ON SKIN: Wash with plenty of water.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P372 Explosion risk in case of fire.

P312 Call a POISON CENTER/doctor if you feel unwell. If skin irritation occurs: Get medical advice/attention. P332+P313 P337+P313 If eye irritation persists: Get medical advice/attention. P362+P364 Take off contaminated clothing and wash it before reuse.

P401 Store in accordance with local/regional/national/international regulations.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

#### · Additional information:

Contains lead. Should not be used on surfaces liable to be chewed or sucked by children.

Contains Rosin. May produce an allergic reaction.

Can become highly flammable in use.

#### NFPA ratings (scale 0 - 4)



Health = 3Fire = 0Reactivity = 3

The substance demonstrates unusual reactivity with water.

(Cont'd. on page 3)

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date December 1, 2015 Revision: December 1, 2015

Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

(Cont'd. from page 2)

· HMIS-ratings (scale 0 - 4)



Warning: Contains lead salt(s). Long-term health hazard.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.
- · Explosive Product Notice

PREVENTION OF ACCIDENTS IN THE USE OF EXPLOSIVES - The prevention of accidents in the use of explosives is a result of careful planning and observance of the best known practices. The explosives user must remember that he is dealing with a powerful force and that various devices and methods have been developed to assist him in directing this force. He should realize that this force, if misdirected, may either kill or injure both him and his fellow workers.

WARNING - All explosives are dangerous and must be carefully handled and used following approved safety procedures either by or under the direction of competent, experienced persons in accordance with all applicable federal, state, and local laws, regulations, or ordinances. If you have any questions or doubts as to how to use any explosive product, DO NOT USE IT before consulting with your supervisor, or the manufacturer, if you do not have a supervisor. If your supervisor has any questions or doubts, he should consult the manufacturer before use.

#### **SECTION 3: Composition/information on ingredients**

- · 3.2 Mixtures
- · Description:

Product will contain various combinations of the following substances. Not all substances will be in each product.

Mixture of substances listed below with nonhazardous additions.

· Dangerous components:	
CAS: 9004-70-0 EC number: 603-037-0	Nitrocellulose, colloided, granular  Expl. 1.1, H201
CAS: 7757-79-1 EINECS: 231-818-8	potassium nitrate  Ox. Sol. 2, H272
CAS: 1309-48-4 EINECS: 215-171-9 Index number: 025-199-09-0	magnesium oxide substance with a Community workplace exposure limit
	(Cont'd. on page 4)

# Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date December 1, 2015 Revision: December 1, 2015

Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

	(Cont'd. from page 3)
CAS: 55-63-0	glycerol trinitrate / nitroglycerin
EINECS: 200-240-8 Index number: 603-034-00-X	STOT RE 2, H373 Aquatic Chronic 2, H411
040 7770 74 7	Flam. Liq. 2, H225
CAS: 7778-74-7 EINECS: 231-912-9 Index number: 017-008-00-5	potassium perchlorate Ox. Sol. 1, H271 Acute Tox. 4, H302
CAS: 7704-34-9 EINECS: 231-722-6 Index number: 016-094-00-1	sulfur Skin Irrit. 2, H315
CAS: 85-98-3 EINECS: 201-645-2	1,3-diethyldiphenylurea
CAS: 7439-89-6 EINECS: 231-096-4	iron substance with a Community workplace exposure limit
CAS: 8050-09-7 EINECS: 232-475-7 Index number: 650-015-00-7	Rosin  Skin Sens. 1, H317
CAS: 122-39-4 EINECS: 204-539-4 Index number: 612-026-00-5	diphenylamine Acute Tox. 3, H301; Acute Tox. 3, H311; Acute Tox. 3, H331 STOT RE 2, H373 Aquatic Acute 1, H400; Aquatic Chronic 1, H410
CAS: 7440-50-8 EINECS: 231-159-6	copper substance with a Community workplace exposure limit
CAS: 7440-66-6	zinc metal Aquatic Acute 1, H400; Aquatic Chronic 1, H410
CAS: 69012-64-2 EINECS: 273-761-1	Silica-Amorphous Silica fume substance with a Community workplace exposure limit
CAS: 8023-77-6 EINECS: 288-920-0	Oleoresin Capsicum  Eye Dam. 1, H318 Acute Tox. 4, H302; Skin Irrit. 2, H315
	ne identity and exact percentages are being withheld as a trade secret.  Hazard Statements refer to section 16.
· Notable Trace Components	s (≤ 0,1% w/w)
CAS: 15245-44-0 EINECS: 239-290-0 Index number: 609-019-00-4	lead 2,4,6-trinitro-m-phenylene dioxide/ lead styphnate Unst. Expl., H200 Repr. 1A, H360Df; STOT RE 2, H373 Aquatic Acute 1, H400; Aquatic Chronic 1, H410 Acute Tox. 4, H302; Acute Tox. 4, H332

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date December 1, 2015 Revision: December 1, 2015

Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

(Cont'd. from page 4)

#### **SECTION 4: First aid measures**

#### · 4.1 Description of first aid measures

General information:

Immediately remove any clothing soiled by the product.

Take affected persons out into the fresh air.

· After inhalation:

Remove victim to fresh air.

Seek medical help for symptoms or if unconscious.

· After skin contact:

Brush off loose particles from skin.

If skin irritation continues, consult a doctor.

· After eye contact:

Remove contact lenses if worn.

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

4.2 Most important symptoms and effects, both acute and delayed

Blast injury if mishandled.

May cause respiratory irritation.

Coughing

Nausea

Dizziness

Cramp

Breathing difficulty

Irritant to skin and mucous membranes.

Irritant to eyes.

· Hazards

Danger of blast or crush-type injuries.

Danger of impaired breathing.

· 4.3 Indication of any immediate medical attention and special treatment needed

If necessary oxygen respiration treatment.

Product may produce physical injury if mishandled. Treatment of these injuries should be based on the blast and compression effects.

#### **SECTION 5: Firefighting measures**

- · 5.1 Extinguishing media
- · Suitable extinguishing agents:

DO NOT fight fire when fire reaches explosives.

Flood area with water. If no water is available, carbon dioxide, dry chemical or earth may be used. If the fire reaches the cargo, withdraw and let fire burn.

- · For safety reasons unsuitable extinguishing agents: None.
- 5.2 Special hazards arising from the substance or mixture Fire or projection hazard.

(Cont'd. on page 6)

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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(Cont'd. from page 5)

Formation of toxic gases is possible during heating or in case of fire.

Product may explode if burned in confined space. Individual cartridges may explode. Mass explosion of many cartridges at once is unlikely.

#### 5.3 Advice for firefighters

#### · Protective equipment:

Wear self-contained respiratory protective device.

Wear fully protective suit.

#### · Additional information

Eliminate all ignition sources if safe to do so.

Cool endangered receptacles with water spray.

Evacuate area and fight fire from from the upwind side.

Flammability Classification: (defined by 29 CFR 1910.1200) Explosive. Can explode under fire conditions. Individual devices will randomly explode. Will not mass explode if multiple devices are involved. Burning material may produce toxic and irritating vapors. In unusual cases, shrapnel may be thrown from exploding devices under containment. See 2008 Emergency response Guidebook for further information.

#### **SECTION 6: Accidental release measures**

#### · 6.1 Personal precautions, protective equipment and emergency procedures

FOR ALL TRANSPORTATION ACCIDENTS, CALL CHEMTEL AT 1-800-255-3924. Spills of this material should be handled carefully. Do not subject materials to mechanical shock or extreme heat. A spill of this material will normally not require emergency response team capabilities.

Remove persons from danger area.

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Protect from heat.

Keep away from ignition sources.

Isolate area and prevent access.

#### 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

Inform respective authorities in case of seepage into water course or sewage system.

#### · 6.3 Methods and material for containment and cleaning up:

Send for recovery or disposal in suitable receptacles.

Dispose contaminated material as waste according to section 13.

Do not flush with water or aqueous cleansing agents

#### 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

#### **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Use only in well ventilated areas.

Handle with care. Avoid jolting, friction and impact.

Information about fire - and explosion protection:

Protect from heat.

(Cont'd. on page 7)

#### according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

(Cont'd. from page 6)

Keep respiratory protective device available.

Emergency cooling must be available in case of nearby fire.

- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- · Requirements to be met by storerooms and receptacles:

Avoid storage near extreme heat, ignition sources or open flame.

- · Information about storage in one common storage facility: Store away from foodstuffs.
- Further information about storage conditions: Store in cool, dry conditions in well sealed receptacles.
- · 7.3 Specific end use(s) No further relevant information available.

#### **SECTION 8: Exposure controls/personal protection**

- · Additional information about design of technical facilities: No further data; see section 7.

· 8.1 Control p	parameters
· Ingredients v	with limit values that require monitoring at the workplace:
1309-48-4 ma	agnesium oxide
PEL (USA)	Long-term value: 15* mg/m³ fume; *total particulate
TLV (USA)	Long-term value: 10* mg/m³ *as inhalable fraction
EL (Canada)	Short-term value: 10** mg/m³ Long-term value: 10* 3** mg/m³ *inhalable fume;**respirable dust and fume
EV (Canada)	Long-term value: 10 mg/m³ inhalable
	erol trinitrate / nitroglycerin
PEL (USA)	Ceiling limit: 2 mg/m³, 0,2 ppm Skin
REL (USA)	Short-term value: 0,1 mg/m³ Skin
TLV (USA)	Long-term value: 0,46 mg/m³, 0,05 ppm Skin
EL (Canada)	Long-term value: 0,05 ppm Skin
EV (Canada)	Long-term value: 0,5 mg/m³, 0,05 ppm Skin
7439-89-6 iro	on
EV (Canada)	Long-term value: 1* 5** mg/m³ as iron;*salts, water-soluble;**welding fume
8050-09-7 Ro	osin
TLV (USA)	DSEN, RSEN, L
EL (Canada)	S
	(Cont'd. on page

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

		(Cont'd. from page 7)
122-39-4 diph	nenylamine	
REL (USA)	Long-term value: 10 mg/m³	
TLV (USA)	Long-term value: 10 mg/m³	
EL (Canada)	Long-term value: 10 mg/m³	
EV (Canada)	Long-term value: 10 mg/m³	
7440-50-8 co	pper	
PEL (USA)	Long-term value: 1* 0,1** mg/m³ as Cu *dusts and mists **fume	
REL (USA)	Long-term value: 1* 0,1** mg/m³ as Cu *dusts and mists **fume	
TLV (USA)	Long-term value: 1* 0,2** mg/m³ *dusts and mists; **fume; as Cu	
EL (Canada)	Long-term value: 1* 0,2** mg/m³ *dusts and mists; **fume, as Cu	
EV (Canada)	Long-term value: 0,2* 1** mg/m³ as copper, *fume;**dust and mists	
69012-64-2 S	ilica-Amorphous Silica fume	
TLV (USA)	TLV withdrawn	
	Long-term value: 4* 1,5** mg/m³ fume *total; **respirable	
, ,	Long-term value: 2 mg/m³ respirable	

- · **DNELs** No further relevant information available.
- · PNECs No further relevant information available.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Do not inhale dust / smoke / mist.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing.

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

#### · Respiratory protection:

Wear positive pressure NIOSH or European EN149 vapor respirators when deploying product in large quantities.

Protection of hands:



Protective gloves

Wear gloves when handling deployed rounds.

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

(Cont'd. on page 9)

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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(Cont'd. from page 8)

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

#### · Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Safety glasses

· Limitation and supervision of exposure into the environment

No special requirements.

No further relevant information available.

Risk management measures

See Section 7 for additional information.

Organizational measures should be in place for all activities involving this product.

No further relevant information available.

SECTION 9: Physical and chemical properties		
9.1 Information on basic physical a	and chemical properties	
General Information		
Appearance:		
Form:	Solid material	
Colour:	Dark grey	
Odour:	Characteristic	
Odour threshold:	Not determined.	
pH-value:	Not applicable.	
Change in condition		
Melting point/Melting range:	Not determined.	
Boiling point/Boiling range:	Not determined.	
Flash point:	Not applicable.	
Flammability (solid, gaseous):	Highly flammable.	
,	Contact with water liberates extremely flammable gases.	
Auto/Self-ignition temperature:	Not determined.	
Decomposition temperature:	Not determined.	
-	(Cont'd. on page	

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

		(Cont'd. from page
Self-igniting:	Product is not self-igniting.	
Danger of explosion:	Fire or projection hazard.	
Explosion limits:		
Lower:	Not determined.	
Upper:	Not determined.	
Vapour pressure:	Not applicable.	
Density:	Not determined.	
Relative density	Not determined.	
Vapour density	Not applicable.	
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
water:	Insoluble.	
Partition coefficient (n-octano	I/water): Not determined.	
Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
9.2 Other information	No further relevant information available.	

#### **SECTION 10: Stability and reactivity**

- 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided:

No decomposition if used and stored according to specifications.

10.3 Possibility of hazardous reactions

Toxic fumes may be released if heated above the decomposition point.

Fire or projection hazard.

Reacts with strong acids and alkali.

Reacts violently with oxidising agents.

- 10.4 Conditions to avoid Sources of ignition, open flame, incompatible materials.
- · 10.5 Incompatible materials: Oxidizers
- · 10.6 Hazardous decomposition products:

Carbon monoxide and carbon dioxide

Nitrogen oxides

Sulphur oxides (SOx)

#### **SECTION 11: Toxicological information**

- · 11.1 Information on toxicological effects
- · Acute toxicity Based on available data, the classification criteria are not met.

(Cont'd. on page 11)

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

		(Cont'd. from page 10)
· LD/LC5	0 valu	es relevant for classification:
55-63-0	glyce	rol trinitrate / nitroglycerin
Oral	LD50	115 mg/kg (mouse)
		105 mg/kg (rat)
Dermal	LD50	29 mg/kg (rat)
		280 mg/kg (rabbit)
85-98-3	1,3-di	ethyldiphenylurea
Oral	LD50	780 mg/kg (rat, female)
122-39-	4 diph	enylamine
Oral	LD50	1120 mg/kg (rat)

#### · Primary irritant effect:

Effects based on exposure to dusts/mists/spray/vapours released during deployment. Unused product does not possess these effects.

Skin corrosion/irritation

Causes skin irritation.

· Serious eye damage/irritation

Causes serious eye irritation.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Acute effects (acute toxicity, irritation and corrosivity): Irritating to eyes, respiratory system and skin.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction):
- · Germ cell mutagenicity Based on available data, the classification criteria are not met.
- · Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure

May cause respiratory irritation.

- STOT-repeated exposure Based on available data, the classification criteria are not met.
- · Aspiration hazard Based on available data, the classification criteria are not met.

#### **SECTION 12: Ecological information**

- · 12.1 Toxicity
- · Aquatic toxicity:

The product contains materials that are harmful to the environment.

#### 85-98-3 1,3-diethyldiphenylurea

LC50 15,6 mg/l (zebra fish)

- · 12.2 Persistence and degradability The product is partially biodegradable. Significant residuals remain.
- · 12.3 Bioaccumulative potential May be accumulated in organism
- 12.4 Mobility in soil No further relevant information available.
- Additional ecological information:
- · General notes:

This statement was deduced from the properties of the single components.

The product contains heavy metals. Avoid transfer into the environment. Specific preliminary treatments are necessary

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

(Cont'd. on page 12)

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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(Cont'd. from page 11)

Do not allow product to reach ground water, water course or sewage system. Danger to drinking water if even small quantities leak into the ground.

- 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- vPvB: Not applicable.
- 12.6 Other adverse effects No further relevant information available.

#### **SECTION 13: Disposal considerations**

- · 13.1 Waste treatment methods
- · Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system. Must be specially treated adhering to official regulations.

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all relevant local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes. Residual materials should be treated as hazardous.

- · Uncleaned packaging:
- · Recommendation: Disposal must be made according to official regulations.

SECTION 14: Transport infor	mation
· 14.1 UN-Number · DOT, ADR, IMDG, IATA	UN0301
· 14.2 UN proper shipping name · DOT, IMDG, IATA · ADR	Ammunition Tear-producing with burster, expelling charge or propelling charge 0301 Ammunition Tear-producing with burste expelling charge or propelling charge
14.3 Transport hazard class(es)	
TA TOXIC CORROSVE	
Class	1.4
· Label ·	1.4G, 6.1, 8
1.4 (G) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E	
<b>▼</b>	

# Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

Printing date December 1, 2015 Revision: December 1, 2015

Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

	(Cont'd. from page 12)
·Label	1.4G+6.1+8
·IMDG	
1.4	
· Class · Label	1.4 1.4/6.1/8
· IATA	
1.4	
· Class · Label	1.4 1.4 (6.1, 8)
· 14.4 Packing group · DOT, ADR, IMDG, IATA	II
· 14.5 Environmental hazards: · Marine pollutant:	No
· 14.6 Special precautions for user · EMS Number:	Not applicable. F-A,S-Q
· 14.7 Transport in bulk according to Anne Marpol and the IBC Code	ex II of Not applicable.
· Transport/Additional information:	
· ADR · Tunnel restriction code	D/E
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	0 Code: E2 Maximum net quantity per inner packaging: 30 g Maximum net quantity per outer packaging: 500 g
· UN "Model Regulation":	UN0301, Ammunition Tear-producing with burster, expelling charge or propelling charge, 1.4G (6.1+8), II

(Cont'd. on page 14)

# Safety Data Sheet according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

(Cont'd. from page 13)

SECTION 15: Regulatory information	
15.1 Safety, health and environmental regulations/legislation specific United States (USA) SARA	for the substance or mixtu
Section 355 (extremely hazardous substances):	
None of the ingredients are listed.	
Section 313 (Specific toxic chemical listings):	
7757-79-1 potassium nitrate	
55-63-0 glycerol trinitrate / nitroglycerin	
TSCA (Toxic Substances Control Act):	
All ingredients are listed.	
Proposition 65 (California):	
Chemicals known to cause cancer: Present in trace quantities.	
15245-44-0 lead 2,4,6-trinitro-m-phenylene dioxide/ lead styphnate	
Chemicals known to cause reproductive toxicity for females:  None of the ingredients are listed.	
Chemicals known to cause reproductive toxicity for males:	
None of the ingredients are listed.	
Chemicals known to cause developmental toxicity: Present in trace quantities.	
15245-44-0 lead 2,4,6-trinitro-m-phenylene dioxide/ lead styphnate	
Carcinogenic Categories	
EPA (Environmental Protection Agency)	
7778-74-7 potassium perchlorate	NL
7440-50-8 copper	D
7440-66-6 zinc metal	D, I,
IARC (International Agency for Research on Cancer)	
7631-86-9 silicon dioxide	
69012-64-2 Silica-Amorphous Silica fume	
NIOSH-Ca (National Institute for Occupational Safety and Health)	
None of the ingredients are listed.	
Canada	
Canadian Domestic Substances List (DSL)	
All ingredients are listed.	
Canadian Ingredient Disclosure list (limit 0.1%)	
122-39-4 diphenylamine	
Canadian Ingredient Disclosure list (limit 1%)	
1309-48-4 magnesium oxide	

## according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA GHS

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

(Cont'd. from page 14)

7631-86-9 silicon dioxide

- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I

None of the ingredients are listed.

- Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

None of the ingredients are listed.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

#### **SECTION 16: Other information**

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

#### · Relevant phrases

- H200 Unstable explosives.
- H201 Explosive; mass explosion hazard.
- H225 Highly flammable liquid and vapour.
- H271 May cause fire or explosion; strong oxidiser.
- H272 May intensify fire; oxidiser.
- H300 Fatal if swallowed.
- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H310 Fatal in contact with skin.
- H311 Toxic in contact with skin.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H318 Causes serious eye damage.
- H330 Fatal if inhaled.
- H331 Toxic if inhaled.
- H373 May cause damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- H411 Toxic to aquatic life with long lasting effects.
- H412 Harmful to aquatic life with long lasting effects.

#### · Abbreviations and acronyms:

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA) HMIS: Hazardous Materials Identification System (USA)

DNEL: Derived No-Effect Level (REACH)

(Cont'd. on page 16)

#### according to 1907/2006/EC (REACH), 1272/2008/EC (CLP), and OSHA **GHS**

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Trade name: Muzzle Blast 37mm Powder Dispersion Round, OC

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PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern vPvB: very Persistent and very Bioaccumulative NIOSH: National Institute for Occupational Safety

Expl. 1.1: Explosives, Division 1.1

Expl. 1.4: Explosives, Division 1.4

Unst. Expl.: Explosives, Unstable explosives Flam. Liq. 2: Flammable liquids, Hazard Category 2

Ox. Sol. 1: Oxidising Solids, Hazard Category 1

Ox. Sol. 2: Oxidising Solids, Hazard Category 2

Acute Tox. 2: Acute toxicity, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 4: Acute toxicity, Hazard Category 4 Acute Tox. 1: Acute toxicity, Hazard Category 1

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Skin Sens. 1: Sensitisation - Skin, Hazard Category 1

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3 STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2 Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

Aquatic Chronic 3: Hazardous to the aquatic environment - Chronic Hazard, Category 3

#### Sources

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